

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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Federal Communications Commission  
Office of General Counsel

In the Matter of

Amendment of the Commission's  
Rules Regarding Multiple Address  
Systems

WT Docket No. 97-81

To: The Commission

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**COMMENTS OF PRONET INC.**

ProNet Inc. ("ProNet"), through its attorneys and pursuant to Section 1.419 of the Commission's Rules, 47 C.F.R. § 1.419, hereby comments on the Commission's Notice of Proposed Rule Making ("NPRM")<sup>1/</sup> in the above-captioned proceeding.

**I. INTRODUCTION AND STATEMENT OF INTEREST**

ProNet is one of the largest paging carriers in the nation, operating in all commercial mobile radio service bands and serving over 1.2 million subscribers throughout the country. ProNet also provides wide-area paging services to medical professionals in over a dozen major metropolitan areas, utilizing Part 90 frequencies allocated to the Special Emergency Radio Service. In connection with these paging operations, ProNet and its subsidiaries hold licenses for and operate several multiple address system ("MAS") facilities authorized under Parts 22 and 101 of the Rules.

In stark contrast to the views expressed in the NPRM, ProNet believes that assigning most MAS spectrum by auction will violate constraints imposed by statute on the categories of spectrum

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<sup>1/</sup> The *NPRM* was released February 27, 1997.

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that are eligible for this type of licensing. This is particularly true for the 300 kilohertz of paired spectrum in the 928/959 MHz bands, governed principally by Part 22 rules and used predominantly by common carriers for control purposes. Even if the NPRM's auction proposals were unambiguously within the scope of the Commission's statutory auction authority, however, the instant proposal affords insufficient interference protection to incumbent operators. These flaws in the NPRM must be assessed and corrected before final rules for MAS licensing are adopted by the Commission.

## **II. THE COMMISSION SHOULD EXEMPT 928/959 MHz BAND MAS FREQUENCIES FROM COMPETITIVE BIDDING**

The Commission's decision to subject the 928/959 MHz Band to competitive bidding and geographic licensing is based upon faulty premises wholly unsupported in the record. The majority use of this band, *i.e.*, control of paging systems, is not reasonably considered "subscriber based." It should be treated similarly to other frequency bands allocated for control purposes, none of which are subjected to geographic licensing or competitive bidding.

### **A. The NPRM Erroneously Concludes That The Majority Use Of 928/959 MHz Band Is "Subscriber Based"**

The proposal to subject 928/959 MHz MAS spectrum to competitive bidding rests on a novel and unproven assertion-- that the majority use of these bands is "subscriber based, an essential requirement for auction eligibility under Section 309(j)(2) of the Act."<sup>2/</sup> Rather than provide authority for this claim, the NPRM merely states that it was "discussed above," even though the only preceding paragraph (*i.e.*, ¶5) that discusses 928/959 MHz MAS spectrum states pertinently that:

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<sup>2/</sup> *NPRM* at ¶11.

The Commission also allocated six 25-kilohertz paired channels in the 928 and 959 MHz bands[] for common carrier Domestic Public Land Mobile ("DPLM") use under Part 22 of our Rules for control of wide-area paging networks.[] In an effort to facilitate the efficient use of this "pool" approach, we adopted sharing criteria. Specifically, under our current rules, if the MAS channels under the POFM pool have been licensed in a given geographic area, Part 101 eligibles may apply for MAS channels allocated for DPLM operations, and *vice versa*[],<sup>3/</sup>

The NPRM (at ¶4), however, concedes that the subject frequencies are used "primarily" to control multiple paging transmitters in a common geographical area, which is precisely how ProNet deploys its own MAS assignments. Indeed, this relationship was explicitly recognized in 1982 when 928/959 MHz spectrum was dedicated to MAS.<sup>4/</sup> Thus, the NPRM's conclusion that the 928/959 MHz MAS band is used predominantly for "subscriber-based" services makes sense only if control of a base transmitting facility is construed to be analogous to a "subscriber-based" service. ProNet respectfully submits that such an analogy is completely untenable and unreasonable.

First, subscribers are utterly indifferent to the manner in which a wide area paging system is controlled. Paging carriers frequently delegate responsibility for system control to a third party satellite carrier or even an alternate access provider. In either case, the third party provider of control

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<sup>3/</sup> *Id.* at ¶5 (footnotes omitted). Moreover, the *NPRM* mistakenly asserts (¶48, n.93) that the *Competitive Bidding Second Report and Order* contains the requisite analysis of the "principal use" of MAS mandated by Section 309(j)(2)(A) allowing for auction of the 928/959 MHz Band if licensed under Part 22. The *Competitive Bidding Second Report and Order* was hardly decisive regarding the Commission's authority to auction MAS (or other control channels). Rather, "common carriers" were analyzed generally under Section 309(j)(2)(A). *Id.* at 2358. Even where the Commission did address specific services, it nowhere addressed control channels generally, or Part 22 MAS specifically. In addition, subsequent to the *Competitive Bidding Second Report and Order*, the Commission revised Part 22; as a result, point-to-multipoint frequency allocations are no longer lumped in same rule section as paging channels (compare Section 22.621 *et. seq.* with former Section 501(g)(2)).

<sup>4/</sup> "[T]he RCC will use the new 900 MHz channels to link its control point with multiple base stations, which will 'talk to' their paging receivers on conventional paging channels." *Multiple Address Systems*, 88 FCC 2d 1178 (1982).

services has privity of contract solely with the paging carrier, not the end user subscribers who are completely ignorant of how their carrier controls the base transmitters comprising the system. To conclude that the control function is fundamentally transformed into a subscriber service merely because the carrier assumes this function personally is logically inconsistent with the prior example (where the lack of a nexus between the entity providing control and the end user is indisputable).

Second, the Commission already considered in a separate proceeding whether "intermediate links," defined as a broad category of services that includes transmitter control operations, satisfies the requirements for auction eligibility set forth in Section 309(j)(2) of the Act.<sup>5/</sup> Although the Commission initially proposed subjecting "intermediate link" frequencies to competitive bidding, commenting parties "strenuously and almost universally opposed" this proposal, *inter alia*, because an intermediate link cannot transmit a signal directly to a subscriber.<sup>6/</sup> Although the proposal to auction intermediate links was ultimately abandoned for different reasons, the Commission never refuted the commenting parties who contended that intermediate links were rendered ineligible for competitive bidding by the tests imposed by Section 309(j)(2).<sup>7/</sup>

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<sup>5/</sup> *Implementation of Section 309(j) of the Communications Act-- Competitive Bidding* (Second Report and Order PR Docket No. 93-253), 9 FCC Rcd 2348, 2355 (1994) ("*Competitive Bidding Second Report and Order*").

<sup>6/</sup> *Id.* at 2355.

<sup>7/</sup> *Id.* at 2355-56. The reasons asserted by the Commission for disavowing its original proposal to auction intermediate links were lack of mutual exclusivity among prospective applicants (due to prior frequency coordination requirements), as required by Section 309(j)(1), and likelihood that such auctions would cause significant delay in provision of new services. Because MAS applicants must secure prior coordination and because a paging carrier must have control facilities in place before new and expanded services can be implemented, the Commission's rationale with respect to intermediate link frequencies is equally applicable to 928/956 MHz MAS bandwidth.

Finally, characterizing 928/956 MHz MAS spectrum as dedicated to the provision of “subscriber-based” service is irreconcilable with the Commission’s consideration of other frequency bands used principally for control purposes. This inconsistency is discussed below.<sup>8/</sup>

**B. Auctioning 928/959 MHz MAS Spectrum Will Contradict The Commission’s Treatment Of Comparable Frequency Bands Regulated Under Part 22 of the Rules**

The 928/959 MHz Band is indistinguishable from services exempted from auctions by the Commission because 928/959 MHz is not primarily used in a manner enabling subscribers to “receive communications signals” or to “transmit directly communications signals” as mandated by Section 309(j)(2)(A).<sup>9/</sup> As discussed above, paging operators use this spectrum to control other operations ultimately providing subscriber services, however, the control transmissions on MAS frequencies are neither received nor transmitted directly by subscribers. In this regard, use of the 928/959 MHz Band by paging operators is no different than their use of the 72-76 MHz band, point-to-point microwave channels licensed under Part 22 of the Rules, or 928/952/956 MHz MAS. These control channels are not assigned by auction, nor has the Commission proposed to employ auctions

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<sup>8/</sup> ¶11 states that 928/959 and 932/941 are substitutable and will be considered as a whole in evaluating the demand for future MAS spectrum use. The former, however, are heavily used by paging operators as intermediate links in the provision of actual service. This use should not be lumped together with the vacant 932/941 MHz Band and the 50,000 applications for that band which have been pending for five years (apparently with little effort from applicants to obtain action on these applications). The Commission itself stresses that 932/941 MHz applicants have had “ample opportunity to carry out their business plans with little additional expenditure by applying for other MAS channels.” *NPRM* at ¶57. Whatever rights these applicants may have, equating their interests as applicants with the interests of 928/959 MHz operators ignores reality.

<sup>9/</sup> The same is true with respect to existing control use of the 928/952/956 MHz Band which, as proposed in the *NPRM*, will not be subject to competitive bidding.

in assigning these channels, despite recent opportunities to do so.<sup>10/</sup> Indeed, the sole difference between 928/959 MHz and other Part 22 control channels is that the latter are required to control at least 4 remote base stations. The NPRM is bereft of any justification for treating 928/959 MHz MAS as more analogous to paging than 72-76 MHz or point-to-point microwave control.

Nor, from a technical standpoint, is there any difference between Part 22 MAS and private operational fixed microwave ("POFM"), which was previously exempted from Section 309(j) as "private" rather than subscriber-based.<sup>11/</sup> The system architecture is substantially the same, and in each case the MAS use is internal to the licensee's business operations.<sup>12/</sup> Therefore, the disparate treatment proposed by the NPRM is unwarranted.

**C. Absent Competitive Bidding, Geographic Area Licensing Is Unnecessary For 928/959 MHz MAS Frequencies**

As shown above, competitive bidding is inappropriate for the 928/959 MHz Band because of its predominant use for control of paging operations. For the same reasons, geographic licensing of 928/959 MHz as proposed by in the NPRM is contrary to the public interest. As the Commission notes, geographic licensing is based upon on pre-defined service areas rather than site-based

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<sup>10/</sup> In the Commission's recently-concluded proceeding regarding licensing of paging spectrum, *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate the Future Development of Paging Systems*, WT Docket No. 96-18, Second Report and Order (released February 24, 1997) (the "*Paging Proceeding*"), all paging channels were subject to an application freeze, and all exclusive paging assignments were subsequently converted to a geographic licensing and auction regime. Control channels used in connection with paging systems, however, were not even considered for competitive bidding.

<sup>11/</sup> *Competitive Bidding Second Report and Order*, at 2354.

<sup>12/</sup> MAS facilities controlling paging transmitters are used in a roughly comparable way that, for example, an alarm business's MAS facilities are used; in neither case is MAS the primary business of the company.

licensing. ProNet agrees that in many instances, geographic licensing is advantageous,<sup>13/</sup> however, the Commission's proposal here in no way corresponds to existing deployment of 928/959 MHz MAS in the real world. ProNet and other paging operators have installed their MAS transmitters according to the geographic and technical configuration of their paging networks. Where control transmitters on other available frequencies are utilized, MAS transmitters need not be used across an entire geographic area. Accordingly, if competitive bidding for 928/959 MHz is not employed, the site-by-site licensing regime should remain unchanged as well.

Alternatively, should geographic licensing be adopted, the Commission should prescribe service areas that correspond more closely to the paging operations being controlled by the MAS spectrum. Thus, consistent with the Second Report and Order in the Paging Proceeding,<sup>14/</sup> several frequencies should be assigned on an MTA basis, instead of assigning all channels on an EA basis.

Similarly, coverage requirements make no sense if, as is the case here, the spectrum is dedicated to control of other communications services. As discussed below, the Commission proposes to define the service area for MAS transmitters as a circle with a 25 mile radius. Population coverage based on this modest service area will significantly understate the "coverage" of MAS transmitters controlling paging operations. Each MAS transmitter controls a minimum of four remote (paging) transmitters which, in turn, each serve subscribers based on different service areas. Thus, a single MAS is likely to control an area far greater than defined by a single 25 mile service area. Further, defining the relevant area will depend upon the number, location and power

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<sup>13/</sup> In the recent *Paging Proceeding*, for example, ProNet supported the Commission's creation of a geographic licensing regime.

<sup>14/</sup> *Paging Proceeding*, at ¶¶16 and 23.

of the controlled paging transmitters. Minimum coverage requirements based on population or geographic area are therefore unlikely to promote efficient use of MAS spectrum. Instead of population coverage requirements, ProNet suggests that the Commission require geographic licensees to construct a minimum number of transmitters within prescribed time periods, *i.e.*, three and/or five years of license grant.

### **III. INTERFERENCE PROTECTION FOR INCUMBENTS MUST ACCOUNT FOR REAL-WORLD OPERATIONS**

The Commission's correctly proposes to grandfather incumbent MAS operations in any frequency bands converted to geographic licensing. Its proposal to grandfather incumbents, and afford them interference protection, based on a service area defined by a circle with a 25 mile radius,<sup>15/</sup> however, will not adequately protect existing operations and, therefore, must be modified. Adopting such a limited service area definition is both unduly restrictive and extraneous.

The Commission's proposal will understate existing control operations by ProNet and other carriers, creating the potential for unacceptable interference to these operations from geographic licensees. The proposed 25 mile service area is based not upon actual service areas used by existing carriers, but upon an assumed service area for purposes of defining co-channel mileage separation.<sup>16/</sup> MAS transmitters are not currently prohibited from controlling remote paging transmitters more than 25 miles away, however. Indeed, controlling a greater number of transmitters using an MAS

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<sup>15/</sup> *NPRM* at ¶20.

<sup>16/</sup> *Id.* This assumed service area is nowhere defined in the Commission's Rules as limiting the placement of remote transmitters to be controlled by an MAS facility. Rather, the 25 mile service area is the area within which an acceptable grade of service may be obtained. *See Amendment of Sections 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies*, PR Docket No. 87-5, 3 FCC Rcd 1564, 1569 (1988).



transmitter fully in accordance with its authorization is an efficient use of spectrum, and reduces operating costs, resulting in lower cost services to the public.

The Commission's proposal to codify the 25 mile service area to restrict incumbent operations will immediately strip interference protection from transmissions controlling remote paging transmitters more than 25 miles from the MAS transmitter. The proposal will also prevent control of additional paging transmitters more than 25 miles away in the future, irrespective of whether existing separation criteria (discussed below) prevent a geographic licensee from causing interference with signals to the controlled transmitter.

Instead, ProNet supports the Commission's proposal (NPRM at ¶19, n. 39) to continue protecting authorized MAS transmitters based on fixed mileage separation requirements. Specifically, new MAS transmitters licensed under Part 22 must be located at least 70 miles from existing or pending co-channel transmitters.<sup>17/</sup> Under Part 101 of the Rules, MAS transmitters must be located at least 90 miles from co-channel fixed transmitters, and 70 miles from the center point of MAS systems defined as "mobile."<sup>18/</sup> Following these existing rules, the Commission should allow incumbents to make any modifications to existing MAS facilities that do not increase the signal level at the outer perimeter of the incumbent's protected area, *i.e.*, 90 miles with respect to co-channel fixed stations, and 70 miles with respect to mobile systems.<sup>19/</sup> This protection is

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<sup>17/</sup> See Section 22.625 of the Rules.

<sup>18/</sup> See Section 101.195(c)(3) of the Rules. The separation distance for "mobile" to "mobile" co-channel systems is 50 miles. MAS stations used to control remote paging transmitters are not defined as "mobile."

<sup>19/</sup> ProNet agrees that Part 22 and Part 101 Rules governing MAS should be made consistent or consolidated. Specifically, the Commission should revised Section 22.625(a) to be consistent with Section 101.105(c)(3) regarding co-channel separation. At present, Section 22.625(a) provides the same protection,  
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analogous to the protection afforded incumbents in the Paging Order which, as expressed in the NPRM (at ¶20), is one of the Commission's objectives in this proceeding.<sup>20/</sup>

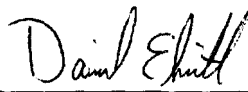
Alternatively, the Commission should adopt a service area larger than 25 miles to provide greater flexibility for paging control system configuration. In accordance with existing separation requirements, ProNet suggests a service area radius of 45 miles.

#### IV. CONCLUSION

WHEREFORE, the Commission should modify its proposed rules consistent with the foregoing.

Respectfully submitted,

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<sup>19/</sup> (...continued)

i.e., 70 miles, for "fixed-to-mobile" as "fixed-to-fixed;" it should be modified to reflect the 90 mile separation required for "fixed-to-fixed" under Section 101.105(c)(3).

<sup>20/</sup> In the *Paging Order* (at ¶56-58), the Commission affirmed that incumbents may make any system modifications that do not increase the composite interference contours of their existing systems; service areas are no longer relevant in determining whether modifications are permitted.